What is Claimed is:

1. A self-adhering underlayment for metal roofing assemblies comprising:

a dual-compound composite sheet having a carrier sheet with a front side and a back side, the carrier sheet being sandwiched between a top layer and a bottom layer:

the top layer comprised of a mixture of: (a) polypropylene modifiers comprised of isotactic polypropylene, ethylene-propylene copolymer, atactic polypropylene and polyethylene, (b) filler, and (c) asphalt;

the bottom layer comprised of heat-and-pressure activated self-adhesive compound comprised of a mixture of: (a) styrene-butadiene-styrene copolymer, (b) styrene-isoprene-styrene copolymer, (c) hydrocarbon tackifying resins, and (d) asphalt; and

the top and bottom layers forming oppositely facing upper and lower surfaces.

2. A self-adhering underlayment as described in Claim 1, wherein:

the first top layer is comprised of a mixture of: (a) 5% to 25% polypropylene modifiers comprised of isotactic polypropylene, ethylene-propylene copolymer, atactic polypropylene and polyethylene, (b) 8% to 70% of filler, and (c) 45% to 75% asphalt; and

the second bottom layer of heat-and-pressure activated self-adhesive compound is comprised of a mixture of: (a) 3% to 10% styrene-butadiene-styrene copolymer, (b) 4% to 11% styrene-isoprene-styrene copolymer, (c) 20% to 33% hydrocarbon tackifying resins, and (d) remainder asphalt.

3. A self-adhering underlayment as described in Claim 2, wherein:

the hydrocarbon tackifying resins in the bottom layer compound is primarily Polyvinyl Butyral.

4. A self-adhering underlayment as described in Claim 3, wherein:

the bottom layer compound comprises: (a) 3% to 10% styrene-butadiene-styrene copolymer, (b) 0% to 5% styrene-isoprene-styrene copolymer, (c) 6% to 25% hydrocarbon tackifying resins, (d) 8% to 40% mineral stabilizers, and (e) remainder asphalt.

5. A self-adhering underlayment as described in Claim 1, wherein:

said filler is selected from the group consisting of: limestone, talc, fly ash, volcanic ash, graphite, carbon black, silica, china clay, fire retardants and combinations thereof.

6. A self-adhering underlayment as described in Claim 5, wherein:

the Atactic Polypropylene top layer compound further contains a fire retardant filler additive selected from the group consisting of calcium borate, magnesium borate, a mixture of antimony tri-oxide and deca bromo diphenyl oxide.

7. A self-adhering underlayment as described in Claim 1, wherein:

the Atactic Polypropylene top layer compound contains a tackifying resin.

8. A self-adhering underlayment as described in Claim 1, wherein:

a surfacing agent is at least partly imbedded in the upper surface of the composite providing said upper surface with resistance to skidding.

9. A self-adhering underlayment as described in Claim 8, wherein:

the surfacing agent is a fabric selected from the group consisting of non-woven polypropylene, stitch-bonded polyester and a film carried by the upper surface of the top .

10. A self-adhering underlayment as described in Claim 8, wherein:

the surfacing agent is a polyolefinic film having anti-skid surface treatment and high temperature resistance.

11. A self-adhering underlayment as described in Claim 1, wherein:

a release liner having a contact and non-contact surface is applied to the lower surface of the composite; and

the release liner is a polyester, polypropylene or polyethylene film having a siliconized contact surface and a white color non-contact surface.

12. A self-adhering underlayment as described in Claim 1, wherein:

a side lap having a width of 3 inches to 4 inches runs longitudinally along one lengthwise edge of the composite; and

an end lap having a width of 4 inches to 6 inches runs widthwise along one end of the composite.

13. A self-adhering underlayment as described in Claim 12, wherein:

a release film is applied to the side lap and end lap.

14. A self-adhering underlayment as described in Claim 1, wherein:

a surfacing agent comprised of fabric surfacing is at least partly imbedded in the upper surface of the composite in areas other than said side and end laps.

15. A self-adhering underlayment as described in Claim 1, wherein:

a surfacing agent comprised of film surfacing is at least partly imbedded in the upper surface of the composite in areas other than said side and end laps.

16. A self-adhering underlayment as described in Claim 1, wherein:

said carrier is made of polyester.

17. A self-adhering underlayment as described in Claim 1, wherein:

said carrier is made of fiberglass.

18. A self-adhering underlayment as described in Claim 1, wherein:

said carrier is made of a material selected from the group consisting of polyester and fiberglass and a combination of polyester and fiberglass.

19. A self-adhering underlayment for metal roofing assemblies comprising:

a composite having a carrier sheet with a front side and a back side, the carrier sheet being sandwiched between a top layer and a bottom layer:

the top layer comprised of a mixture of: (a) 0% to 25% polypropylene modifiers comprised of isotactic polypropylene, ethylene-propylene copolymer, atactic polypropylene and polyethylene, (b) 8% to 70% of filler, and (c) 45% to 75% bitumen;

the bottom layer comprised of heat-and-pressure activated self-adhesive compound comprised of a mixture of: (a) 3% to 10% styrene-butadiene-styrene copolymer, (b) 0% to 11% styrene-isoprene-styrene copolymer, (c) 6% to 33% hydrocarbon tackifying resins, (d) 0% to 40% mineral stabilizers, and (e) remainder asphalt; and

the top and bottom layers forming oppositely upper and lower surfaces.

20. A self-adhering underlayment as described in Claim 17, wherein:

the hydrocarbon tackifying resins in the bottom layer compound is primarily Polyvinyl Butyral.

21. A self-adhering underlayment as described in Claim 18, wherein:

the bottom layer compound comprises: (a) 3% to 10% styrene-butadiene-styrene copolymer, (b) 0% to 5% styrene-isoprene-styrene copolymer, (c) 6% to 25% hydrocarbon tackifying resins, (d) 8% to 40% mineral stabilizers, and (e) remainder asphalt.

22. A self-adhering underlayment as described in Claim 17, wherein:

said filler is selected from the group consisting of: limestone, talc, fly ash, volcanic ash, graphite, carbon black, silica, china clay, fire retardants and combinations thereof.

23. A self-adhering underlayment as described in Claim 20, wherein:

the Atactic Polypropylene top layer compound further contains a fire retardant filler additive selected from the group consisting of calcium borate, magnesium borate, a mixture of antimony tri-oxide and deca bromo diphenyl oxide.

24. A self-adhering underlayment as described in Claim 17, wherein:

the Atactic Polypropylene top layer compound contains a tackifying resin.

25. A self-adhering underlayment as described in Claim 17, wherein:

a surfacing agent is at least partly imbedded in the upper surface of the composite providing said upper surface with resistance to skidding.

26. A self-adhering underlayment as described in Claim 23, wherein:

the surfacing agent is a fabric.

27. A self-adhering underlayment as described in Claim 23, wherein:

the surfacing agent is film.

28. A self-adhering underlayment as described in Claim 17, wherein:

a release liner having a contact and non-contact surface is applied to the lower surface of the composite; and

the release liner is a polyester, polypropylene or polyethylene film having a siliconized contact surface and a white color non-contact surface.

29. A self-adhering underlayment as described in Claim 17, wherein:

a side lap having a width of 3 inches to 4 inches runs longitudinally along one lengthwise edge of the composite; and

an end lap having a width of 4 inches to 6 inches runs widthwise along one end of the composite.

30. A self-adhering underlayment as described in Claim 26, wherein:

a release film is applied to the side lap and end lap.

31. A self-adhering underlayment as described in Claim 17, wherein:

a surfacing agent comprised of a granular material is partly imbedded in the upper surface of the composite in areas other than said side and end laps.

32. A self-adhering underlayment as described in Claim 17, wherein:

said carrier is made of polyester.

33. A self-adhering underlayment as described in Claim 17, wherein:

said carrier is made of fiberglass.

34. A self-adhering underlayment as described in Claim 17, wherein:

said carrier is made of a material selected from the group consisting of polyester and fiberglass and a combination of polyester and fiberglass.

35. A self-adhering underlayment for metal roofing assemblies comprising:

a dual-compound composite sheet having a carrier sheet with a front side and a back side, the carrier sheet being sandwiched between a top layer and a bottom layer:

the top layer comprised of a mixture of: (a) polypropylene modifiers comprised of isotactic polypropylene, ethylene-propylene copolymer, atactic polypropylene and polyethylene, (b) filler, and (c) asphalt;

the bottom layer comprised of heat-and-pressure activated self-adhesive compound comprised of a mixture of: (a) styrene-butadiene-styrene copolymer, (b) styrene-isoprene-styrene copolymer, (c) hydrocarbon tackifying resins, and (d) asphalt; and

said filler being comprised of a material selected from the group consisting of: limestone, talc, fly ash, volcanic ash, graphite, carbon black, silica, china clay, fire retardants and combinations thereof,

said top layer having non-woven polypropylene fabric at least partly imbedded in the upper surface of the composite providing said upper surface with resistance to skidding,

a release liner applied to the lower surface of the composite; and

a side lap running longitudinally along one lengthwise edge of the top layer of the composite; and

an end lap running widthwise along one end of the composite.

a release film is applied to the side lap and end lap, and said a surfacing agent being partly imbedded in the upper surface of the composite in areas other than said side and end laps.

said carrier being made of a material selected from the group consisting of polyester and fiberglass and a combination of polyester and fiberglass.

36. A self-adhering underlayment as described in Claim 31, wherein:

the top layer compound further being comprised of at least one fire retardant filler additives selected from the group consisting of calcium borate, magnesium borate, a mixture of antimony tri-oxide and deca bromo diphenyl oxide.

37. A self-adhering underlayment as described in Claim 31, wherein:

the top layer compound is further comprised of tackifying resins.

38. A self-adhering underlayment as described in Claim 31, wherein:

the top layer compound is further comprised of 0% to 2% tackifying resin.

39. A self-adhering underlayment as described in Claim 31, wherein:

the release liner is a polyester, polypropylene or polyethylene film having a siliconized contact surface and a white color non-contact surface.